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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/723,949	11/26/2003	Stephen Gold	100204298-1	9416

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EXAMINER	
DANG, THANH HA T	

ART UNIT	PAPER NUMBER
2163	

DATE MAILED: 10/04/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/723,949	GOLD ET AL.	
	Examiner	Art Unit	
	Thanh-Ha Dang	2163	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *26 November 2003*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-30* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-30* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *26 November 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *11/26/03*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

1. Claims 1-30 are rejected in this Office Action.

Claim Rejections - 35 USC § 101

2. 35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claim 19 is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter:

- Claim 19 recites an article of manufacture, which is not limited to tangible embodiments. In view of Applicant's disclosure, specification page 15 [0063] ("... data signal, e.g. carrier wave ..."), the medium is not limited to tangible embodiments, instead being defined as including both tangible embodiments (e.g., floppy diskette, memory, etc.) and intangible embodiments (e.g., data signal). As such, the claim is not limited to statutory subject matter and is therefore non-statutory.
- Claim 19 recites an article of manufacture comprising processor-usable medium comprising processor-usable code configured to cause processing circuitry to " receive ...; effect ...; receive ...; access ...; and initiate storage ... status" that merely describes a number of computing steps. The cited steps conclude with "initiate storage of the delta version ... status" that has no

tangible results obtained by the claimed limitations to form the basis of statutory subject matter under 35 USC101.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-30 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 5,870,765 issued to Bauer et al. (Bauer).

As to **Claims 1, 11, 15, 19 and 23**, *Bauer teaches* a data management system comprising:

- a plurality of storage devices *(Figure 1, block12 and block22a/x/z)* individually comprising a physical storage space *(Figure 1, wherein block12a/x/z illustrate physical storage space),* wherein the physical storage space of one of the storage devices is configured to store a baseline version of a data object *(Figure 1, wherein block12 illustrates the storage device and block12a/x/z store baseline version data object)* and the physical storage space of an other of the storage devices is configured to store a delta version of the data object *(Figure 1, wherein block22a/x/z store delta version, column 8, lines 30-39)*; and
- processing circuitry configured to control storage operations of at least one of the storage devices *(Figure 1 wherein block11 corresponds to the processing*

circuitry, column 8, line 24), to process a restore request with respect to the data object, to access the delta version from the other of the storage devices responsive to the restore request *(column 1, lines 50-54)*, and to initiate communication of data of the baseline version and the delta version of the data object to a computer system *(Figure 1 wherein label15 and label25a/x/-z illustrate initiating communication of data to a computer system, column 6, lines 51-55)*.

As to **Claims 2, 17, 20 and 24**, *Bauer teaches* wherein the processing circuitry is configured to combine the delta version with the baseline version to provide a restored version of the data object *(Figure 5A, wherein block115 and 120 illustrate the steps to combine the delta version with the baseline version to provide a restored version of the data object illustrated in block125, column 9, lines 34-65 and column 10, lines 23-31)*, and to control the communication of the restored version of the data object to the computer system *(Figures 6A-B, column 11, lines 29-42)*.

As to **Claims 3, 14 and 21**, *Bauer teaches* wherein a client agent of the computer system is configured to combine the delta version with the baseline version to provide a restored version of the data object *(Figure 3, column 8, lines 21-23)*.

As to **Claim 4 and 25**, *Bauer teaches* wherein the processing circuitry comprises processing circuitry of the one of the storage devices which stores the baseline version of the data object *(Figure 1, label21a/x/z, column 6, lines 18-19).*

As to **Claims 5, 13 and 29**, *Bauer teaches* The system of claim 4 wherein the one of the storage devices is configured to receive the delta version from the computer system, and the processing circuitry is configured to forward the delta version to the other of the storage devices *(Figure 6A wherein block340 forward the delta version to the other storage devices).*

As to **Claims 6, 18, 22 and 30**, *Bauer teaches* The system of claim 5 wherein the processing circuitry is configured to forward the delta version to the other of the storage devices responsive to a status of capacity of the one of the storage devices *(column 1, lines 52-54).*

As to **Claims 7, 16 and 27**, *Bauer teaches* further comprising a database *(Figure 1, block12 and block22a/x/z)* configured to store information regarding storage operations of individual ones of the storage devices, and wherein the processing circuitry *(Figure 1, block11 and block21a/x/z)* is configured to access the database to obtain a location of the delta version of the data object on the

other storage device responsive to the restore request *(column 6, lines 10 and lines 18-19).*

As to **Claims 8 and 26**, *Bauer teaches* wherein the processing circuitry comprises processing circuitry of a client agent associated with the computer system *(column 1, lines 64-66 wherein the database synchronizer is equivalent to a client agent).*

As to **Claim 9**, *Bauer teaches* further comprising a local area network configured to communicate the delta version intermediate the one and the other storage devices *(Figure 1 wherein each client node represents a local area network, column 6, lines 16-24).*

As to **Claims 10 and 28**, *Bauer teaches* further comprising a storage area network configured to communicate the delta version intermediate the one and the other storage devices *(Figure 1, wherein block20a/x/z constitute the storage area network, column 6, line 53).*

As to **Claim 12**, *Bauer teaches* wherein the processing means of the other of the storage subsystem means comprises means for uncompressing data of the delta version, and for initiating communication of the uncompressed data of the delta version to the one of the storage subsystem means *(Figure 1 wherein*

label15 and label25a/x/-z illustrate initiating communication of data to a computer system, column 6, lines 51-55).

Citation of Pertinent Prior Art

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

- Armangau et al. (Pub. No. US2005/0015663), "Data Recovery With Internet Protocol Replication With Or Without Full Resync".
- Masaharu Tamatsu (US Patent No. 6,934,877), "Data Backup/Recovery System".
- Mark Squibb (US Patent No. 5,479,654), "Apparatus And Method For Reconstructing A File From A Difference Signature And An Original File".
- Goshey et al. (US Patent No. 6,934,722), "Method Of Finding Application Components In An Intelligent Backup and Restoring System".
- Stakutis et al. (Pub. No. US2006/0075004), "Method, System, And Program For Replicating A File".
- Balcha et al. (US Patent No. 6,233,589), "Method and System For Reflecting Differences Between Two Files".
- Christian Korn (US Patent No. 6,542,906), "Method Of And An Apparatus For Merging A Sequence Of Delta Files".

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thanh-Ha Dang whose telephone number is 571-272-4033. The examiner can normally be reached on Monday-Friday from 9:00 AM to 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Don Wong can be reached on 571-272-1834. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Thanh-Ha Dang
Examiner
Art Unit 2163

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